

REMARKS

Applicants respectfully request reconsideration and allowance of all pending claims.

I. Status of the Claims

In this Amendment C, which is being filed simultaneously with Applicants' Request for Continued Examination, claims 45 and 51 have been amended and claim 50 has been cancelled, in order to more particularly claim certain embodiments herein. Accordingly, claims 34, 37-49 and 51-53 remain pending.

II. Withdrawn Claims

It is noted that the final Office Action indicates that claims 37-44 have been withdrawn from consideration by the Examiner "as being drawn to a non-elected invention/species." In response thereto, Applicants respectfully point out that:

- (A) upon careful review of the prosecution history of the present application, Applicants cannot find **any** indication that a Restriction Requirement or an Election of Species requirement was **ever** issued by the Office; and,
- (B) the withdrawn claims have **already been subjected to substantive examination** by the Office (see the Office action dated December 23, 2008), and no amendments to these claims were made in response thereto.

In view of the foregoing, Applicants submit the Office's withdrawal of claims 37-44 was improper, and therefore further submit that these claims should remain pending and under examination herein.

III. Allowable Subject Matter

Applicants acknowledge that claims 51-53 are allowable. Applicants further acknowledge that claims 47 and 48 are objected to as dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

IV. Rejection of Claims under 35 U.S.C. §112, Second Paragraph

Claims 45 and 46 have been rejected as indefinite under 35 U.S.C. § 112, second paragraph. For the reasons set forth in detail below, Applicants respectfully request reconsideration of these rejections.¹

A. Claim 45

The Office has rejected claim 45 as indefinite, specifically on the basis that the phrase 'slight excess' is a relative phrase and will vary from person to person absent a definition set forth in the specification. Without commenting on the accuracy or the appropriateness of the Office's rejection here, Applicants have amended claim 45 to remove the word "slight," in order to expedite examination and allowance of all pending claims. The claim has also been amended to delete the phrase "at 37°C" and insert the text "incubation for" in place thereof. Support may be found in Example 3. Applicants therefore respectfully request withdrawal of this rejection.

B. Claim 46

Claim 46 has been rejected as indefinite because, according to the Office, some of the specific species recited within this claim show a halogen substituent at X¹, X² or X³, and halogens are not permissible substituents in view of base claim 34. In response thereto, Applicants respectfully request reconsideration.

Claim 34, from which claim 46 directly depends, states in relevant part that:

at least two of X₁, X₂ and X₃ are monodentate ligands selected from the group consisting of CO, NH₃, aromatic heterocycles, thioethers and isocyanides; or

two of X₁, X₂ and X₃ are part of a bidentate ligand and the other one is a monodentate ligand selected from the group consisting of CO, aromatic heterocycles, thioethers and isocyanides.

¹ Inasmuch as claim 50 has been cancelled in this Amendment C, the substance of the Office's rejection of this claim has not been addressed at this time.

Thus, it is to be noted that while the second clause clearly excludes the possibility of X_1 , X_2 or X_3 being a halogen atom (because they are either part of a bidentate ligand or selected from the species in the recited Markush group), the first clause **does not**. Specifically, while the "at least two" phrase of the first clause clearly means that, in some embodiments, all three of X_1 , X_2 and X_3 will be monodentate ligands selected from the species referenced in the Markush group, this phrase also means that, in other embodiments, **only two** of X_1 , X_2 and X_3 will be monodentate ligands selected from the referenced species. In the case of the latter embodiments, **one** of X_1 , X_2 and X_3 **can be a different ligand, such as a halogen atom**, as further illustrated in claim 46.

In view of the foregoing, Applicants respectfully submit that claim 46 fully satisfies the requires of 35 U.S.C. §112, second paragraph; that is, claim 46 particularly points out and distinctly claims the subject matter Applicants regard as their invention. Applicants therefore request reconsideration and withdrawal of the present rejection.

V. Rejection of Claims under 35 U.S.C. § 102(b)

A. Rejection Presented in Final Office Action

Claims 34, 49 and 50 are rejected under 35 U.S.C. § 102(b) as anticipated by Dyszlewski *et al.* (Molecular Imaging, January 2002, Vol. 1, pages 24-35, hereinafter referred to as "Dyszlewski"). The Office specifically cites figure 1, page 25, and notes that the "species of Dyszlewski *et al.* encompass the instant invention when Z1 (*sic*), X2, and X3 are isocyanides and M is Tc or Re." (See the final Office action mailed June 5, 2009, on page 6, first and second full paragraphs, as well as the middle chemical structure in the first row of Figure 1).

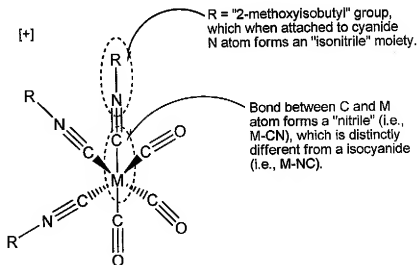
In response thereto, Applicants respectfully point out that the noted compound disclosed in Dyszlewski **does not** encompass the instant invention; stated another way, the subject matter of claim 34, from which claim 49 depends, **does not** read on the subject matter disclosed by Dyszlewski in general, and the noted compound disclosed by Dyszlewski in particular. The compound disclosed in Dyszlewski includes **nitrile** substituents, or more specifically, a carbonitrile, wherein the **carbon atom** of the CN substituent is **bound to the metal** (*i.e.*, M-C≡N). In contrast, claim 34 references, in relevant part, **isocyanide** substituents, wherein the **nitrogen atom** of the CN substituent is **bound to the metal** (*i.e.*, M-N≡C). As a result, **substituting a nitrile in place of an isocyanide does not give the same compound**.

Furthermore, in addition to their structural differences, these two substituents are also different in terms of their properties, syntheses, and/or reaction behaviors.

B. Comments from Advisory Action based on Dyszlewski

Initially, Applicants call the Office's attention to Exhibits A-D, submitted herewith, which are printouts from the Second Edition (1997) of the International Union of Pure and Applied Chemistry (IUPAC) Compendium of Chemical Terminology (as found at <http://old.iupac.org/publications/compendium/C.html>). These printouts include clear definitions for the terms nitrile, isocyanide, isonitrile and carbonitrile, respectively.

In the Advisory Action mailed August 12, 2009, the Office noted that page 25 of Dyszlewski refers to the substituents or ligands of figure 1 as "isonitriles", and thus maintained that Dyszlewski reads on Applicants' claims. However, as Applicants have illustrated below, a proper reading of Dyszlewski reveals that the term "isonitrile" was used to indicate that there is a functional group bound to the cyanide nitrogen atom. Specifically, as illustrated below, Dyszlewski refers to the substituent shown in figure 1 as a "2-methoxyisobutyl isonitrile ligand," thus referencing the connectivity of the 2-methoxyisobutyl substituent that is attached to the cyanide nitrogen. Applicants once again point out that in Figure 1 of Dyszlewski, the cyanide carbon is bound to the metal and the R group, identified as "2-methoxyisobutyl" in the text, is bound to the cyanide nitrogen.



Accordingly, neither figure 1 nor the text of Dyszlewski suggests a bond between the cyanide nitrogen and the metal atom, as claimed by Applicants.

Inasmuch as Dyszlewski does not teach all the limitations of claim 34, Applicants respectfully submit that claim 34, as well as all claims depending therefrom (including claim 49), are not anticipated by Dyszlewski. Reconsideration of the present rejection is therefore requested.

C. Comments from Advisory Action regarding Wikipedia

Applicants note that the Office has cited Wikipedia as an authoritative source on the meaning of the terms "isocyanide" and "isonitrile." In response thereto, clarification is respectfully requested, inasmuch as Applicants thought the U.S. Patent Office no longer allowed Examiners to rely on Wikipedia as an acceptable source of information, for purposes of determining the meaning of a given term. Specifically, Applicants note that the September 4, 2006 issue of Business Week quoted then-Commissioner for Patents John J. Doll as saying that, as of August 15, 2006, Wikipedia was no longer part of the "digital toolbox" that Examiners may use to help determine a patent application's validity, which Applicants believe would include the determination of the meaning of a given term. Mr. Doll was directly quoted as saying: "The problem with Wikipedia is that it's constantly changing." Mr. Doll added that "[w]e've taken Wikipedia off our list of accepted sources of information." (See Business Week, September 4, 2006, the relevant portion of which is attached hereto as Exhibit E).

VI. Claim 51

The Examiner notes in the Advisory Action that Compound 18 was still present in claim 51, although it was deleted in the amendment of March 18, 2009 (Amendment B). The Examiner further notes that claim 51 lacks a period. In response thereto, please note that these oversights have been corrected in the present Amendment C.

CONCLUSION

In view of the foregoing, Applicants respectfully request reconsideration and allowance of all pending claims.

The Commissioner is hereby authorized to charge Deposit Account No. 13-1160 for any fees that may be required for this Amendment C, as well as the fee associated with Applicants' Request for Continued Examination being filed simultaneously herewith.

Respectfully submitted,



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VIA EFS

nitriles

Compounds having the structure $RC\equiv N$; thus C -substituted derivatives of hydrocyanic acid, $HC\equiv N$. In systematic nomenclature, the suffix nitrile denotes the triply bound $\equiv N$ atom, not the carbon atom attached to it.

See also *cyanides*, *isocyanides*, *carbonitriles*.

1995, 67, 1350

isocyanides

The isomer $\text{HN}^+\equiv\text{C}^-$ of hydrocyanic acid, $\text{HC}\equiv\text{N}$, and its *hydrocarbyl* derivatives RNC ($\text{RN}^+\equiv\text{C}^-$).

1995, 67, 1344

+ isonitriles

An obsolete term, which should not be used, for *isocyanides*.
1995, 67, 1345

carbonitriles

In systematic nomenclature, the suffix -carbonitrile is used to name compounds $RC\equiv N$ where the suffix includes the carbon atom of the $-CN$. However, carbonitrile is not a class name for *nitriles*.

1995, 67, 1325



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UP FRONT

Talk Show

"Quattrone was a very big fish, but the evidence against him was not very good." -- *John Fahy, a former federal prosecutor in New Jersey, on former investment banker Frank Quattrone's deal with prosecutors allowing him to avoid a third trial and return to business, as reported by Bloomberg News*

A Stock Soars On High Anxiety

Heavy demand for security technology drove American Science & Engineering (ASEI) to No. 12 on *BusinessWeek's* latest Hot Growth ranking of 100 small companies earlier this year (BW – June 5). But on Aug. 9 the Billerica (Mass.) company announced disappointing earnings, and its stock fell 21%, to \$6.30 a share.

Now AS&E's fortunes have changed again – literally overnight. On Aug. 10, British authorities announced they had thwarted an alleged terrorist plot to blow up airplanes using explosives hidden in sports drinks. AS&E makes X-ray systems for screening cargo, vehicles, luggage, and even people. And unlike standard metal detectors used in airports, its system can spot liquids. It therefore could be used to nab anyone attempting to sneak them onto planes. The U.S. Homeland Security Dept.'s Transportation Security Administration is planning to test AS&E's people-screening systems in airports.

The company's stock flew to 47.20 on news of the terrorist plot, marking a full recovery from its earnings-related swoon. It could take several months for AS&E's top line to reflect the impact of all this. But, says Bob Postle, the company's vice-president for sales and marketing, "we've certainly had an increase in phone calls."

By Arlene Weintraub

Dear Ben, Feel Our Pain

With housing slumping dramatically, hopes for a soft landing in the sector could be evaporating. According to Goldman Sachs (GS), housing inventories are at their highest levels in more than a decade. Just how worried are homebuilders? A few weeks ago, on the eve of the Federal Reserve Board's Aug. 8 Open Market Committee meeting, the National Association of Homebuilders sent letters to Fed Chief Ben Bernanke and each of the other members of the interest-rate-setting committee.

The message: Official stats don't capture how badly housing is hurting, since those figures don't include canceled contracts, which doubled over the past year. The letter also argued that inflation is more benign than feared, because one measure, rising rents, is overweighted in the consumer price index. NAHB Chief Economist David Seiders says this is the first time since he joined the staff, in 1984, that the group has written such a letter to the Fed.

Granted, such a move seems mild compared with the actions of the early 1980s, when, to protest double-digit interest rates, a desperate NAHB mailed lumber (two-by-fours, meant to symbolize unbuilt homes) to then Fed Chief Paul Volcker. And it's not known if the NAHB's recent letter influenced the bankers in the marble temple, who chose -- for the first time in two years -- not to raise rates at its August meeting. But, says Tom Schlesinger, director of the Financial Markets Center, a Fed watchdog group, the urgent communication is "certainly a symptom" of the current anxiety.

By Catherine Yang

"Shop In Thrift Stores" (Tip No. 39)

From "101 Ways to Save Money," sent by Northwest Airlines to a number of employees coping with steep pay cuts and layoffs as part of the airline's plan to emerge from Chapter 11.

- 8. Replace 100 watt bulbs with 60 watt.
- 15. Get hand-me-down clothes and toys for your kids from family and friends.
- 18. Take a shorter shower.
- 21. Make your own baby food.
- 34. Change the oil in your car yourself regularly.
- 46. Don't be shy about pulling something you like out of the trash.

Kicking Wiki Out Of The Patent Office

Patents are enduring, conferring rights on their owners for up to 20 years. Yet until about a week ago, scores of them may have been granted based partly on information that can be altered with a keystroke from anyone surfing the Web.

On Aug. 15, the U.S. Patent & Trademark Office yanked Wikipedia from the digital toolbox its examiners use to help determine a patent application's validity. But over the past several years, examiners used the online encyclopedia, which allows users to edit entries, to inform their decisions. Wikipedia has been cited in patent decisions on everything from car parts to chip designs.

"The problem with Wikipedia is that it's constantly changing," Patents Commissioner John Doll said. "We've taken Wikipedia off our list of accepted sources of information." An agency spokesperson said inquiries from *BusinessWeek* about the use of Wikipedia led to the policy shift.

Critics say the change is long overdue. "I've been complaining about this for years," says Greg Aharonian, publisher of a patent newsletter and a longtime agency gadfly. "From a legal point of view, a Wiki citation is toilet paper." Doll says the agency used Wikipedia entries as background and not as a basis for accepting or rejecting an application.

By Lorraine Woellert